

Amendments to the Claims:

This listing of Claims will replace all prior versions, and listings, of Claims in the application.

Listing of Claims

1. (currently amended) A display comprising substantially a plurality of three-color pixel elements that form at least one row of pixel elements, said three-color pixel element comprising:

a blue emitter disposed at an origin of a rectangular coordinate system having four quadrants;

a pair of red emitters spaced apart from said blue emitter and symmetrically disposed about said origin in a first pair of opposing quadrants of said rectangular coordinate system; and

a pair of green emitters spaced apart from said blue emitter and symmetrically disposed about said origin in a second pair of opposing quadrants of said rectangular coordinate system;

wherein said display further comprises at least first and second gate drivers oriented in a first direction and at least first and second data drivers oriented in a second direction different from said first direction;

wherein ~~each said a first blue emitter~~ is connected to a first gate driver in said first direction and to a first data driver in said second direction; and at least two neighboring blue emitters in the at least one row of pixel elements are connected to the same driver wherein a second neighboring blue emitter is connected to said first data driver in said second direction.

2. (Previously Presented) The display of claim 1 wherein:

said blue emitter is polygonal having corners aligned at x and y axes of said rectangular coordinate system;

said red emitters are polygonal, each having an inwardly-facing edge parallel to a side of said polygonal blue emitter; and

said green emitters are polygonal, each having an inwardly-facing edge to a side of said polygonal blue emitter.

3. (Previously Presented) The display of claim 2 wherein:

said blue emitter is four-sided having equal internal angles, having corners aligned at x and y axes of said rectangular coordinate system;

said red emitters are four-sided having equal internal angles, each having a truncated inwardly-facing corner forming an edge parallel to a side of said four-sided blue emitter; and

said green emitters are four-sided having equal internal angles, each having a truncated inwardly-facing corner forming an edge parallel to a side of said four-sided blue emitter.

4. (Previously Presented) The display of claim 3 wherein:

said blue emitter is square having corners aligned at x and y axes of said rectangular coordinate system;

said red emitters are square, each having a truncated inwardly-facing corner forming an edge parallel to a side of said square blue emitter; and

said green emitters are square, each having a truncated inwardly-facing corner forming an edge parallel to a side of said square blue emitter.

5. (Previously Presented) The display of claim 1 wherein:

said blue emitter is square-shaped having sides aligned parallel to x and y axes of said rectangular coordinate system; and

said red emitters and said green emitters are L-shaped and envelop said square blue emitter.

6. – 15. (Canceled).

16 (currently amended) A display comprising substantially a plurality of three-color pixel elements that form at least one row of pixel elements, said three-color pixel element comprising:

a pair of red emitters, outer corners of each forming a first two opposing corners of a square;

a pair of green emitters, outer corners of each forming a second two opposing corners of said square; and

a blue emitter disposed at a center of said square;

wherein said display further comprises at least first and second gate drivers oriented in a first direction and at least first and second data drivers oriented in a second direction different from said first direction;

wherein each of said emitters a first blue emitter is connected to a first gate driver in said first direction and to a first data driver in said second direction; and at least two neighboring blue emitters in the at least one row of pixel elements are connected to the same driver wherein a second neighboring blue emitter is connected to a second gate driver in said first direction and to said first data driver in said second direction.

17. (Previously Presented) The display of claim 16 wherein:

said blue emitter disposed at said center of said square and is polygonal having sides aligned such that imaginary lines perpendicularly bisecting each side pass through corners of said polygon;

said red emitters are polygonal, each having an inwardly-facing edge parallel to an edge of said polygonal blue emitter; and

said green emitters are polygonal, each having an inwardly-facing edge parallel an edge of said polygonal blue emitter.

18. (Previously Presented) The display of claim 17 wherein:

said blue emitter disposed at said center of said square and is four-sided having equal internal angles, having sides aligned such that imaginary lines perpendicularly bisecting each side pass through said corners of said square;

said red emitters are four-sided having equal internal angles, each having a truncated inwardly-facing corner forming a line parallel to an edge of said four-sided blue emitter; and

said green emitters are four sided having equal internal angles, each having a truncated inwardly-facing corner forming a line parallel to an edge of said four-sided blue emitter.

19. (Previously Presented) The display of claim 18 wherein:

said blue emitter disposed at said center of said square and is square-shaped having sides aligned such that imaginary lines perpendicularly bisecting each side pass through said corners of said square;

said red emitters are square-shaped, each having a truncated inwardly-facing corner forming a line parallel to an edge of said four-sided blue emitter; and

said green emitters are square-shaped, each having a truncated inwardly-facing corner forming an edge parallel to a side of said four-sided blue emitter.

20. (Previously Presented) The display of claim 16 wherein:

said blue emitter is disposed at said center of said square and is square-shaped having sides parallel to sides of said square; and

said red emitters and green emitters are L-shaped and envelop said square-shaped blue emitter.

21. – 30. (Canceled).

31. (currently amended) An array for a display comprising:
- a plurality of row positions forming at least one row in the array;
 - a plurality of column positions; and
 - a plurality of three-color pixel elements, one of said elements disposed in each of said row positions and said column positions, each of said three-color pixel elements comprising:
 - a blue emitter disposed at an origin of a rectangular coordinate system having four quadrants;
 - a pair of red emitters spaced apart from said blue emitter and symmetrically disposed about said origin in a first pair of opposing quadrants of said rectangular coordinate system; and
 - a pair of green emitters spaced apart from said blue emitter and symmetrically disposed about said origin in a second pair of opposing quadrants of said rectangular coordinate system;
- wherein each emitter is connected to a column driver and at least two neighboring blue emitters disposed in the at least one row in the array are connected to the same column driver.
32. (Previously presented) The array of claim 31 wherein the spatial frequency of each three-color pixel element in a row direction is greater than in the column direction.
33. (Previously presented) The array of claim 31 wherein the spatial frequency of each three-color pixel element in a column direction is greater than in the row direction.

34. (currently amended) An array for a display comprising:
- a plurality of row positions forming at least one row in the array;
 - a plurality of column positions; and
 - a plurality of three-color pixel elements, one of said elements disposed in each of said row positions and said column positions, each of said three-color pixel elements comprising:
 - a blue emitter disposed at a center of a square;
 - a pair of red emitters spaced apart from said blue emitter, outer corners of each forming a first two opposing corners of said square; and
 - a pair of green emitters spaced apart from said blue emitter, outer corners of each forming a second two opposing corners of said square;wherein each emitter is connected to a column driver and at least two neighboring blue emitters disposed in the at least one row in the array are connected to the same column driver.
35. (Previously presented) The array of claim 34 wherein the spatial frequency of each said three-color pixel element in a row direction is greater than in the column direction.
36. (Previously presented) The array of claim 34 wherein the spatial frequency of each said three-color pixel element in a column direction is greater than in the row direction.

37. (Previously presented) In an array of three-color pixel elements, a row structure comprising:

- first and second three-color pixel elements, each three-color pixel element including first and second red emitters, first and second green emitters, and a blue emitter;

- first and second row line drivers;

- a first row line coupled to said first row line driver, said first row line coupled to said blue emitter of said second three-color pixel element, and said first red emitter and said first green emitter of said first and said second three-color pixel element;

- a second row line coupled to said second row line driver, said second row line coupled to said blue emitter of said first three-color pixel element, and said second red emitter and said second green emitter of said first and said second three-color pixel element;

- first through fifth column line drivers;

- a first column line coupled to said first column line driver, said first column line coupled to said first red emitter and said second green emitter of said first three-color pixel element;

- a second column line coupled to said second column line driver, said second column line coupled to said blue emitter of said first and said second three-color pixel elements;

- a third column line coupled to said third column line driver, said third column line coupled to said second red emitter and said first green emitter of said first three-color pixel element;

- a fourth column line coupled to said fourth column line driver, said fourth column line coupled to said first red emitter and said second green emitter of said second three-color pixel element; and

- a fifth column line coupled to said fifth column line driver, said fifth column line coupled to said second red emitter and said first green emitter of said second three-color pixel element.

38. (Previously presented) An array comprising:

a plurality of rows, each row comprising:

first and second three-color pixel elements, each three-color pixel element including first and second red emitters, first and second green emitters, and a blue emitter;

first and second row line drivers;

a first row line coupled to said first row line driver, said first row line coupled to said blue emitter of said second three-color pixel element, and said first red emitter and said first green emitter of said first and said second three-color pixel elements;

a second row line coupled to said second row line driver, said second row line coupled to said blue emitter of said first three-color pixel element, and said second red emitter and said second green emitter of said first and said second three-color pixel elements;

first through fifth column line drivers;

a first column line coupled to said first column line driver, said first column line spanning said plurality of rows, said first column line coupled to said first red emitter and said second green emitter of said first three-color pixel element in each row;

a second column line coupled to said second column line driver, said second column line spanning said plurality of rows, said second column line coupled to each blue emitter of said first and second three-color pixel elements in each row;

a third column line coupled to said third column line driver, said third column line spanning said plurality of rows, said third column line coupled to said second red emitter and said first green emitter of said first three color pixel element in each row;

a fourth column line coupled to said fourth column line driver, said fourth column line spanning said plurality of rows, said fourth column line coupled to said first red emitter and said second green emitter of said second three-color pixel element in each row; and

a fifth column line coupled to said fifth column line driver, said fifth column line spanning said plurality of rows, said fifth column line coupled to said second red

emitter and said first green emitter of said second three-color pixel element in each row.

39. (currently amended) An image capture device comprising a plurality of three-color pixel elements that form at least one row of pixel elements; each three-color pixel element comprising:

a blue emitter disposed at an origin of a rectangular coordinate system having four quadrants;

a pair of red emitters spaced apart from said blue emitter and symmetrically disposed about said origin in a first pair of opposing quadrants of said rectangular coordinate system; and

a pair of green emitters spaced apart from said blue emitter and symmetrically disposed about said origin in a second pair of opposing quadrants of said rectangular coordinate system;

wherein each emitter is connected to a column driver and at least two neighboring blue emitters in the at least one row of pixel elements are connected to the same column driver.

Claims 40. – 41. (Canceled).

42. (currently amended) A display substantially comprising
_____ at least first and second gate drivers oriented in a first direction and at least first and second data drivers oriented in a second direction different from said first direction; and

_____ a plurality of three-color pixel elements that form at least one row of pixel elements, each three-color pixel element comprising:

a blue emitter;

a pair of red emitters; and

a pair of green emitters such that said red emitters and said green emitters form substantially a checkerboard pattern upon said display;

~~wherein at least two neighboring blue emitters in the at least one row of three-color pixel elements are connected to a same driver~~ a first blue emitter is connected to a first gate driver in said first direction and to a first data driver in said second direction; and wherein a second neighboring blue emitter is connected to said first data driver in said second direction.

43 – 51. (Canceled).

52. (currently amended) The display of claim [[51]] 42 wherein each three-color pixel element further comprises one of a group of patterns, said group comprising:

G	R		R	G
	B	And	B	
R	G		G	R.

53. (currently amended) The display of claim [[51]] 42 wherein said display is one of a group comprising a liquid crystal display, an organic light emitting diode display, an electro luminescent display, a plasma display, and a field emission display.

54. (currently amended) The display of claim [[51]] 42 wherein said first direction is a column direction.

55. (currently amended) The display of claim [[51]] 42 wherein said first direction is a row direction.

56. (Previously Presented) The display of claim 1 wherein said blue emitter comprises an emitting area larger than that of each of said red emitters and said green emitters.

57. (Previously Presented) The display of claim 1 wherein said blue emitter has a larger drive-to-luminance gain than that of each of said red emitters and said green emitters.

58. (New) The display of claim 1 wherein said first and second directions of said gate and data drivers are substantially orthogonal.

59. (New) The display of claim 1 wherein said first and second directions of said gate and data drivers are oriented along substantially mutually independent axes.

60. (New) The display of claim 1 wherein said first direction is a row direction and said second direction is a column direction on said display.

61. (New) The display of claim 1 wherein said first direction is a column direction and said second direction is a row direction on said display.

62. (New) The display of claim 1 wherein said second neighboring blue emitter is further connected to a second gate driver in said first direction.

63. (New) The display of claim 42 wherein said second neighboring blue emitter is further connected to a second gate driver in said first direction.